

Date: Thursday, 2/22/2007 3:01:47 PM  
User: Kim Johnston

# Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SHORT STEP ASSEMBLY HIGH SKID LH
Job Number	: 30842		
Estimate Number	: 10575		
P.O. Number	: <i>N/A</i>	Part Number	: D350591213
This Issue	: 2/22/2007 S.O. No. : <i>N/A</i>	Drawing Number	: D3078 REV A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: <i>N/A</i> Type : LARGE FAB ASSY	Drawing Revision	: A
Previous Run	: 30207	Material	: <i>N/A</i>
Written By	: <i>JA</i>	Due Date	: 3/30/2007 Qty: 10 Um: Each
Checked & Approved By	: <i>JA 07.02.23</i>		
Comment	Est Rev:B 05.10.14 Modified step 10 KJ/EC Est Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM Est Rev:C 06-06-27 Revised as per DSI9340 JLM		

## Additional Product

Job Number: 

Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
-----	----	------------------



Comment: DOCUMENT CONTROL  
Photocopy bluefile and type labels as per PPP D350-591-213 CHG002

*K-S 07.03.05 (10)*

2.0	D2622120C	Extrusion
-----	-----------	-----------



Comment: Qty.: 0.5000 Each(s)/Unit Total : 5.0000 Each(s)  
Pick:

Qty Part Number	Description	Batch
1 D2622-120C	Extrusion	<i>B30199</i>

*FF 07-04-09*

10

3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622-120 extrusion to 59.75" long as per Dwg D3078

2-Drill extrusion as per Dwg D3078 using Jig DT8680 for rivets.

3-Deburr

*FF 07-04-09*

10

4.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

*207-04-09*

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 2/22/2007 3:01:47 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHORT STEP ASSEMBLY HIGH SKID LH

Job Number: 30842

Part Number: D350591213

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3067-1

End Plate 30143

*PE. 07.04.09 10*

6.0

D30631

Support



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3063-1

Support 3 30892

*PE. 07.04.09 10*

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8681, weld Fwd End Plate as per QSI 004 & Dwg D3072

A/R Aluminum Rod M100237  
M102225

3-Grind End Plate flush

*PE. 07.04.09 10*

*PE. 07.04.09 10*

*FF. 07.04.09 (2) (8) (10)*

8.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

*07/04/10 (10)*

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*07/04/10 (10)*

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*M-H*

*07/04/10*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 2/22/2007 3:01:47 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHORT STEP ASSEMBLY HIGH SKID LH

Job Number: 30842

Part Number: D350591213

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*PE. 07.04.10* 10

12.0

D3065041

Step Leg Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3065-041 Step Leg Assy

*B.29978*

*PE. 07.04.10* 10

13.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 D3066-1

Spacer

*B.30467*

*PE. 07.04.10* 10

14.0

MS20600AD4W4

Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total : 160.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

16 MS20600AD4W4 Rivet

*M10285*

*PE. 07.04.10* 10

15.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Rivet Leg Assembly as per Dwg D3078.

*PE. 07.04.10* 10

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*2007.04.10*

10

17.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3067-1

End Plate

*330143*

*PE. 07.04.10* 10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 2/22/2007 3:01:47 PM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHORT STEP ASSEMBLY HIGH SKID LH

Job Number: 30842

Part Number: D350591213

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3078  
A/R Aluminum Rod M100237

4-Grind End Plate flush

*Handwritten:* 10  
10  
10  
10  
07.04.10  
07.04.10  
07.04.10  
07.04.11

19.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

20.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1  
Touch Up Chemical conversion

*Handwritten:* 10x  
07/04/11

22.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING  
Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*Handwritten:* M10370C  
07/04/11 (10)

23.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1  
Wing Walk as per Dwg D3078 and QSI 005 4.4

*Handwritten:* 07/04/12 (10)

24.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

*Handwritten:* 07/4/12 (10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHORT STEP ASSEMBLY HIGH SKID LH

Job Number: 30842

Part Number: D350591213

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

26.0

D2182B

Neoprene Cushion-.750 bl



Comment: Qty.: 0.3000 f(s)/Unit Total : 3.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2182b035 Rubber Cushion B30872 ✓

27.0

D2274

Radius Block



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2274 Radius Block B30518 ✓

28.0

D2732

Rubber Extrusion



Comment: Qty.: 1.0500 f(s)/Unit Total : 10.5000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2732-030(3" LONG) Rubber Cushion B26472 ✓

29.0

D2856400

Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total : 6.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D2856-400(7.2") Abrasion Strip B28850 ✓

30.0

D22301

Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2230-1 Clamp B30155 ✓

7/4/12 SA

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 2/22/2007 3:01:47 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHORT STEP ASSEMBLY HIGH SKID LH

Job Number: 30842

Part Number: D350591213

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

D22303

Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2230-3

Clamp

1330273 ✓

32.0

AN335A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A

Bolt

M102339 ✓

33.0

AN411A

Bolt



Comment: Qty.: 6.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 AN4-11A

Bolt

M5342 ✓

M100743 ✓

M17771 ✓

M7886 ✓

34.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10

Washer

M100274 ✓

M103441 ✓

35.0

AN960JD416

Washer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 120.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 AN960JD416

Washer

M102829 ✓

36.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

M102658 (8X) ✓

7/4/12 50

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 2/22/2007 3:01:47 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHORT STEP ASSEMBLY HIGH SKID LH

Job Number: 30842

Part Number: D350591213

Job Number:



Seq. #:

Machine Or Operation:

Description :

2 MS21042L3

Nut (or -3)

*M102217*

37.0

MS21042L4

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 MS21042L4

Nut (or -4)

*M103914*

38.0

AN413A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Bolt

Batch:

*M103363*

*7/11/12* *82*

39.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

40.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-213

Location:

PPP Rev:

*C* *R-7/4/12*

*①*

41.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*②* *07/04/12*

Job Completion



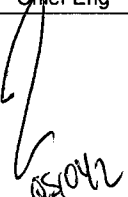

*U* *07-04-12*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/04/12	35.0	12 extra washers were put in same kit		remove washers and restock	SA 07/04/12	DA 07/04/12		DA 07/04/12

NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. <b>D3078</b>	REV. A SHEET 1 OF 2
DATE <b>02.09.11</b>		TITLE <b>STEP ASSEMBLY, HI SHORT</b> SCALE NTS	
A	02.09.11	NEW ISSUE	

**RELEASED**  
02.09.20 *#*

Part No.	Description	QTY -041	QTY -042
D3078-041	Step Assembly, High Short (LH)	X	
D3078-042	Step Assembly, High Short (RH)		X
D2622-60	STEP EXTRUSION	1	1
D3063-1	SUPPORT	1	1
D3065-041	LEG ASSEMBLY	1	1
D3066-1	SPACER	2	2
D3067-1	END PLATE	2	2
MS20600AD4W4	RIVET	16	16

**GENERAL NOTES:**

- 1) -041 SHOWN, FOR -042 INSTALL D3063-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

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UNCONTROLLED COPY  
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WITHOUT NOTICE  
WORK ORDER  
NO. **30842**

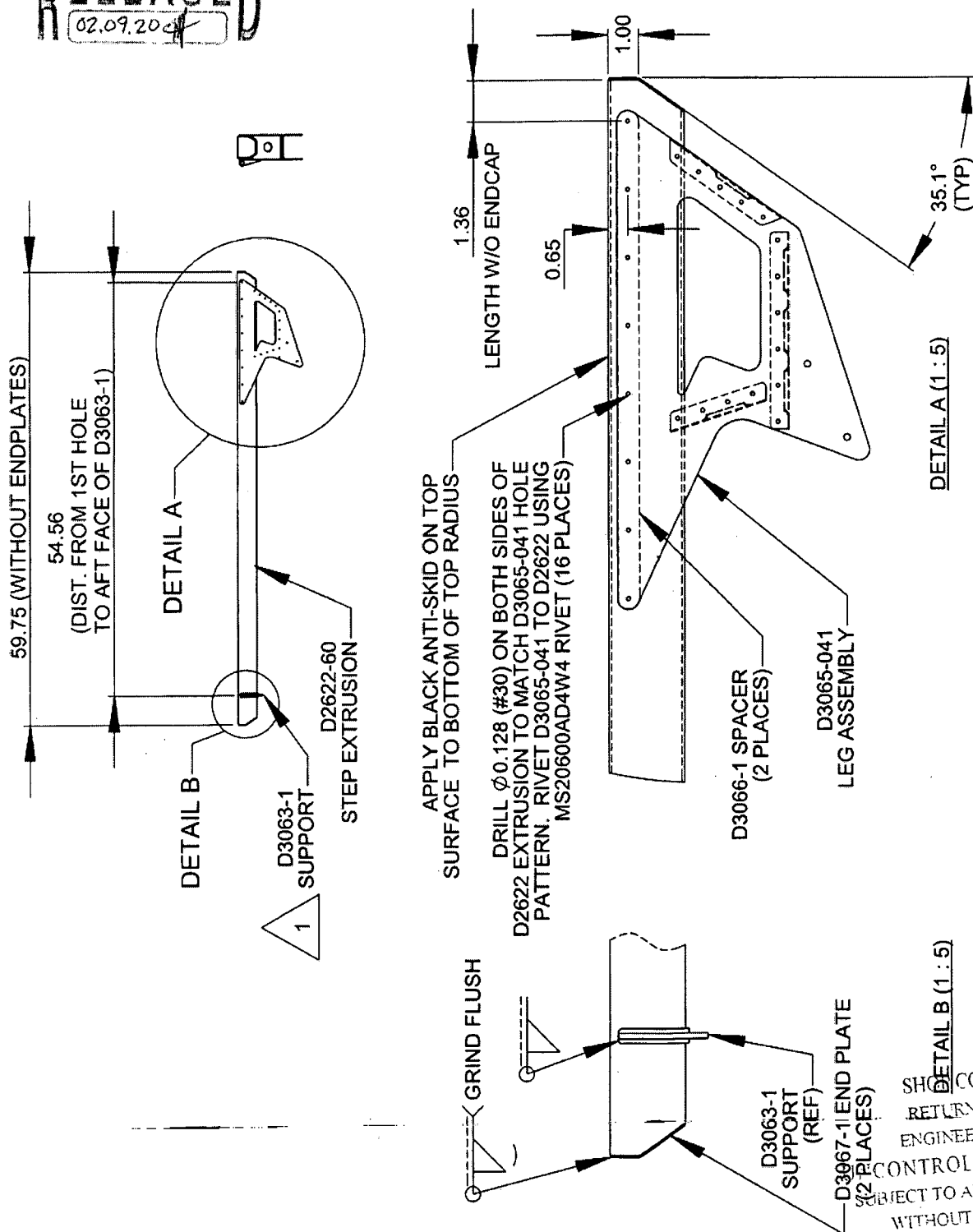
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3078</b>	REV. A SHEET 2 OF 2
DATE <b>02.09.11</b>		TITLE <b>STEP ASSEMBLY, HI SHORT</b>	SCALE 1:20

RELEASED  
02.09.2011



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WITHOUT NOTICE  
WORK ORDER  
NO. 30842

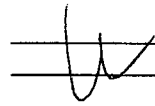
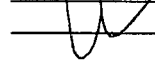
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Date: Tuesday, 6/26/2007 4:16:32 PM  
User: Jason Murdoch

## Process Sheet

Customer	: CC-DAR01 Dart Aerospace Ltd.	Drawing Name	: D350-591-213
Job Number	: 33196		
Estimate Number	: 10804		
P.O. Number	: N/A	Part Number	: D350591213
This Issue	: 6/26/2007	Drawing Number	: R603
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A	Drawing Revision	: N/A
Previous Run	: 00015	Material	: N/A
Written By	: 	Due Date	: 7/3/2007
Checked & Approved By	: 	Qty:	1 Um: Each
Comment	:		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	QC5	INSPECT WORK TO CURRENT STEP



INSPECT WORK TO CURRENT STEP

*Jason Murdoch*  
26.06.07 (1)



Comment: INSPECT WORK TO CURRENT STEP

2.0	D350591213	Heli-Access-Step ShortLH
-----	------------	--------------------------



Heli-Access-Step ShortLH



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Heli-Access-Step ShortLH

Original batch B30842, @ CHG002. R603

*Jason Murdoch*  
28.07.07 (1)

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

1- New labels required.

2- re-identify paper work

3- re-package per PPP D350-591-213 @ CHG 002

*Jason Murdoch*  
28.07.07 (1)

4.0	QC21	FINAL INSPECTION/W/O RELEASE
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FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*07.07.18*  
*Jason Murdoch*

Job Completion



*07.07.18*  
*Jason Murdoch*

